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Navy Personnel Research and Development Center

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Annotated Bibliography of Recruiting-Related Research: 1970 - 1989



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ANNOTATED BIBLIOGRAPHY OF RECRUITING-RELATED RESEARCH: 1970-1989

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FOREWORD

This report contains an annotated bibliography of recruiting-related research accomplished by the Navy Personnel Research and Development Center during the period 1970-1989. Its purpose is to bring together into one reference document the many and diverse strands of research that have been conducted over many years in support of military recruiting. It is expected to be of benefit to the operational and research communities.

Point of contact at the Navy Personnel Research and Development Center concerning this report is Dr. Herb Baker, Code 12, (619) 553-2623 or AUTOVON 553-7635. This effort was funded through Program Element 0603720N (Education and Training: Quick Response).

R. C. SORENSON Associate Technical Director

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CONTENTS

INTRODUCTION1
ANNOTATED BIBLIOGRAPHY OF RECRUITING-RELATED RESEARCH: 1970-1989
MANPOWER SUPPLY ESTIMATION AND MANAGEMENT
MARKETING STRATEGIES
APPLICANT SCREENING
PERSON-JOB MATCHING
RECRUITING MANAGEMENT AND SUPPORT
COMPUTERIZED RECRUITING FUNCTION
DISTRIBUTION LIST 15

INTRODUCTION

This report contains an annotated bibliography of technical reports which address recruiting-related issues published by the Navy Personnel Research and Development Center (NAVPERSRANDCEN) and its predecessor organizations, the Naval Personnel and Training Research Laboratory (NPTRL) in San Diego, CA (1970 - 1973) and the Naval Personnel Research and Development Laboratory (NPRDL) in Washington, DC (1970 - 1973). The period covered by these reports is from 1970 through mid FY 1989.

The bibliography lists reports that cover the following subject areas:

- -Manpower Supply Estimation and Management
- -Marketing Strategies
- -Applicant Screening, Tenure and Performance Prediction
- -Person-Job Matching
- -Recruiting Management and Support
- -Computerized Recruiting Functions

Readers are encouraged to write to the Defense Technical Information Center (DTIC) to receive copies of those reports that are part of its data base. DTIC assigns an "AD" number to each of its reports for easy retrieval. These are indicated in the bibliography. DTIC may be contacted at Cameron Station, Alexandria, VA 22304-6145. If a report does not have an "AD" number, the reader should send requests for reports to the Commanding Officer, NAVPERSANDCEN.

ANNOTATED BIBLIOGRAPHY OF RECRUITING-RELATED RESEARCH: 1970-1989

MANPOWER SUPPLY ESTIMATION AND MANAGEMENT

Thomas, P. J. (Mar 1977). Why women enlist: The Navy as an occupational choice (NPRDC Tech. Rep. 77-20). (AD-A037 340)

Women and men enlisting in the Navy today are making a similar occupational choice now that most of the barriers to equal opportunity have been lifted. Yet there is a popularly held belief, and some evidence for this belief, that the motives for joining and the work values of female and male enlistees differ.

Borack, J. I., & Govindan, M. (Mar 1978). <u>Projections of the U.S. population of 18-year old males in the post 1993-period</u> (NPRDC Tech. Rep. 78-16). (AD-A053 628)

This report discusses a forecasting methodology based upon asymptotic exponential regression that may be utilized to obtain projections of this population in the post-1993 period. Specifically, a methodology is presented to obtain projections of the 18-year-old male population.

Borack, J. I. (Sep 1978). <u>Intentions of women (18-25 years old) to join the military:</u> Results of a national survey (NPRDC Tech. Rep. 78-34). (AD-A060 104)

In anticipation of the projected decline in the national population of young men, defense planners have given increased thought to expanding the role of women in the military. A survey was conducted to gauge the interest of women and men in joining the military under present conditions and under three alternative options involving greater utilization of women. Findings are presented regarding the percentage of women and men interested in joining the military currently and under each alternative.

Bres, E., Charnes, A., Burns, A. D., & Cooper, W. W. (Nov 1979). Optimal officer accession planning for the U.S. Navy (NPRDC Tech. Rep. 80-5). (AD-A078 030)

This report describes the development of a multiperiod goal programming model for deciding how many officers the Navy should commission from several commissioning sources for several career specialty areas. The model, called the Accessioning Into Designators (AIDS) model, was adopted by OP-130, Officer Program Implementations Branch DCNO(MP&T) for planning and policy analysis.

Borack, J. I. (Aug 1980). Forecasting the supply of women available to the Navy (NPRDC Tech. Rep. 80-31). (AD-A088 214)

To gain insight into and obtain estimates of the relative size of the potential female and male Navy military supply pool, health examination survey data, mental aptitude data, and demographic data were analyzed. The population of females and males 17-24 years old was successively decremented by estimates of the population of these individuals not available for military service due to physical/medical, mental, or family reasons. Additionally, individuals not interested in military service were deleted from the estimated supply pool.

Siegal, B., & Borack, J. (Jun 1981). <u>An econometric model of Navy enlistment behavior</u> (NPRDC Tech. Note 81-16). (AD-A015 283)

This effort identified and measured those variables and interrelationships that define the national/regional supply of enlisted personnel for the Navy. An econometric model of the enlistment process, which provides parameter estimates of the model, and forecasts "supply" (or, more accurately, enlistment contracts) under alternative scenarios is presented.

Borack, J. I., & Gay, K. (Jul 1981). The strap enlisted predictor: STEP (NPRDC Tech. Rep. 81-16). (AD-A102 910)

A new computerized management system, the Structured Accession Planning System, will provide Navy planners with techniques to perform integrated manpower management. This system will enable planners to evaluate the relationships between alternative manpower requirements, personnel policies, and the available pool of qualified military manpower.

Borack, J. I. (Sep 1982). <u>Intentions of men 23-29 years old to join the military: Results of a national survey</u> (NPRDC Tech. Rep. 82-62). (AD-A119 611)

Due to the demographic shift in the enlistment pool, increased consideration may be given to augmenting the prime enlistment pool of 17-21 year old males by somewhat older individuals. A survey was conducted to assess the interest of 23-29 year-old men in joining the military under present conditions and under monetary and nonmonetary incentives.

Thomas, G. (May 1983). <u>Feasibility of modeling the supply of older-age accessions</u> (NPRDC Tech, Rep. 83-17), (AD-A015 283)

An analysis was undertaken to determine the feasibility of conducting accession supply modeling for older-age individuals, in response to current recruiting and demographic trends. This report discusses the methodology of supply models and the availability of data. The author concludes that it is feasible to model the supply of olderage enlistees and discusses the necessary procedures.

Borack, J. I. (May 1984). <u>Framework for integrating alternative military manpower supply methods</u> (NPRDC Tech. Rep. 84-42). (AD-A142 002)

This report addresses the different phrases used by military planners and researchers: "supply of manpower for military service," and "military personnel supply." There is no commonly accepted definition of "military manpower supply." This report addresses three principal methods used in personnel supply research, describing how supply is defined within each, along with corresponding strengths and weaknesses. Since no single approach provides a comprehensive understanding of supply, a prospectus for integrating these methods into a logical framework is presented.

Nakada, M., Jerardo, A., & Alberto, R. (Jul 1985). <u>Employment trends in high technology occupations</u> (NPRDC Tech. Rep. 85-20). (AD-A158 068)

College graduates, a primary source for the Navy's unrestricted line officers, in the fields of engineering, mathematics, physical or life sciences, and computer science will be in great demand. This research assessed employment trends and projections through 1995 by industry and occupation. The geographic locations of these high-technology industries and occupations are projected and supply-demand imbalance are identified.

Curtis, E. W., Borack, J. I., & Wax, S. R. (Aug 1987). <u>Estimating the youth population</u> qualified for military service (NPRDC Tech. Rep. 87-32). (AD-A184 375)

This research developed a methodology to estimate and project the number of male high school graduates, 17-21 years old, that can be expected to qualify for military service. Use of the estimate by the Personnel Procurement Division of Headquarters, USMC is described.

MARKETING STRATEGIES

Muldrow, T. (Apr 1970). <u>Motivational factors influencing enlistment decision: U.S. Navy recruitment survey 1969</u> (NPRDL Work, Spec. Rep. 70-4). (AD-A705 117)

This report presents the results of a study conducted to determine the factors which affected the enlistment decision in 1969. Where applicable, the results of this survey were compared with those of the two previous Recruitment Surveys.

Githens, W., & Wilcove, G. (Dec 1977). <u>Relationship between Navy off-duty</u> educational programs and recruitment, performance, and retention (NPRDC Tech. Rep. 78-8). (AD-A048 351)

A series of studies was conducted relating off-duty educational programs to recruiting, performance and retention. The relationships were all high and positive in studies involving the opinions of recruits, current and past Navy Campus for Achievement (NCFA) program participants. Navy operational commands, Navy recruiters, and Navy wives.

Fernandes, K. (Jan 1983). <u>Evaluation of the Navy's recruiting assistance program as a peer networking strategy for recruiting the 19-23 year old market</u> (NPRDC Spec. Rep. 83-11). (AD-A124 262)

To evaluate the effectiveness of the Navy's Recruiting Assistance Program (RAP) for recruiting the 19-23 year-old age group, a variation of RAP was designed that manipulated the age and type of participants, the number participating per recruiting station, and RAP utilization by recruiters.

Fernandes, K., Romanczuk, A. P., Goodstadt, B., & Colby, C. L. (May 1983). Evaluation of a tailored direct-mail marketing strategy for recruiting the 19-23 year-old market (NPRDC Spec. Rep. 83-38). (AD-A129 860)

Materials tailored to the interests of 19-23 year-olds were distributed to subscribers of five selected automobile and motorcycle magazines with a high proportion of readership in this age group. The direct mail campaign did not have a significant impact on enlistment rates and was not effective in appealing to the target population.

Van Matre, N. (Sep 1985). <u>Naval reserve sea air VOTECH (vocational/technical)</u> program: <u>Qualified civilian schools for RAMP (reserve allied medical personnel program)</u> (NPRDC Tech. Rep. 85-4). (AD-A161 336)

This report provided to the Navy recruiting community a listing of the civilian schools that are eligible for participation in a component of the Navy's Sea Air Mariner (SAM) Reserve Program directed toward the Hospital Corpsman (HM) rating.

APPLICANT SCREENING, TENURE AND PERFORMANCE PREDICTION

Sands, W. A. (Apr 1971). <u>Determination of an optimal recruiting-selection strategy to fill a specified quota of satisfactory personnel</u> (NPRDL Work, Res. Memo. 71-34). (AD-723 569)

CAPER model provides an optimal recruiting-selection strategy for personnel decisions which minimizes the total cost of recruiting, selecting, inducting, and training a sufficient number of persons to meet a specified quota of satisfactory personnel.

Sands, W. A. (Aug 1971). <u>Application of the cost of attaining personnel requirements</u> (CAPER) model (NPRDL Work, Tech. Bul. 72-1). (AD-730 706)

This report provides a detailed explanation of the steps involved in utilizing the CAPER model with or without access to computer facilities. A FORTRAN II computer program, including detailed documentation, is presented. This program is designed for a small computer system.

Sands, W. A. (Apr 1973). <u>A bivariate normal version of the cost of attaining personnel requirements model</u> (NPRDL Work, Tech. Rep. 73-18). (AD-759 023)

The purpose of this report is to introduce a bivariate normal version of the model (CAPER II). This CAPER II model requires more statistical assumptions than the original model, but drastically reduces the work involved in input data preparation.

Sands, W. A. (Sep 1973). A method for evaluating alternative recruiting-selection strategies: The cost of attaining personnel requirements (CAPER) model (NPRDC Tech. Rep. 74-3). (AD-770 390)

The cost of attaining personnel requirements (CAPER) model determines an optimal recruiting-selection strategy, providing information necessary to minimize the estimated total cost of recruiting, selecting, inducting, and training a sufficient number of persons to meet a specified quota of satisfactory personnel. The article describes the CAPER model and illustrates its application to a personnel recruiting selection problem.

Bowser, S. (Apr 1974). Non-cognitive factors as predictors of individual suitability for service in the U.S. Navy (NPRDC Tech. Rep. 74-13). (AD-780 438)

This was a pilot study utilizing non-cognitive data sources in the prediction of satisfactory service in the Navy. A methodology was developed which enables a logical selection of subsets of categorical predictors to optimize the prediction of suitability for service. The results support the contention that non-cognitive factors are important and useful in prediction of success.

Sands, W. A. (Apr 1976). <u>Development of a revised odds for effectiveness (OFE) table for screening male applicants for Navy enlistment</u> (NPRDC Tech. Note 76-5). (AD-A013 226)

The original Odds for Effectiveness (OFE-1) was developed to identify those persons likely to render effective naval service. The purpose of this investigation was the development of a revised Odds for Effectiveness (OFE-2) table which would not require arrest information for enlisted applicants.

Sands, W. A. (Apr 1977). <u>A handbook for the bivariate normal version of the cost of attaining personnel requirements (CAPER) model</u> (NPRDL Work, Tech. Rep. 73-19). (AD-759 358)

This report provides a detailed explanation of the steps involved in using the CAPER II model with, or without, access to computer facilities. A FORTRAN IV computer program including detailed documentation is presented.

Sands, W. A. (Jun 1977). <u>Screening male applicants for Navy enlistment</u> (NPRDC Tech. Rep. 77-34). (AD-A040 534)

A new screening instrument that could be used by Navy recruiters to estimate an applicant's probability of surviving the initial two years of service was developed and evaluated. Using this instrument, Prediction Of Enlisted Tenure (POET-2 Model) those applicants with a low probability could be screened out, resulting in a decrease in premature attrition.

Wilcove, G. L., Thomas, J., & Blankenship, C. (Sep 1979). <u>The use of preenlistment variables to predict the attrition of Navy female enlistees</u> (NPRDC Spec. Rep. 79-25). (AD-A075 143)

Exploratory research was undertaken prior to developing a questionnaire for screening female applicants. Attrition factors were identified from interviews and research on turnover, mental health, sex soles, and vocational choice.

Githens, W. H., & Zalinski, J. (May 1983). <u>Marine Corps recruit training attrition: The effects of realistic job preview and stress-coping films</u> (NPRDC Tech. Rep. 83-18). (AD-A129 528)

To reduce recruit training attrition, the Marine Corps had two training films developed. To evaluate the films' effectiveness in reducing attrition, platoons of Marine recruits were assigned to four treatment groups. There were no statistically significant differences in recruit training attrition among the treatment and control groups. Attrition rates among the individual platoons differed significantly.

Lang, D. A., & Abrahams, N. M. (Jul 1985). <u>Marine Corps enlistment standards: Trends and impact of waivers</u> (NPRDC Tech. Rep. 85-26). (AD-A158 450)

Over a six-year period beginning in FY78 there was an increase in the number of enlistment waivers granted to Marine Corps accessions. The objectives of this effort were to 1) determine the source of the increase in waivers over these six years, and 2) assess the impact of this increase on premature separation from the Marine Corps.

Yellen, T. M. (Aug 1975). <u>Validation of the delinquent behavior inventory as a predictor of basic training attrition</u> (NPRDC Tech. Rep. 76-3). (AD-A055 281)

The Delinquent Behavior Inventory (DBI) was designed to identify Navy applicants likely to display delinquent behavior, including illicit drug use while in the Navy. The DBI was administered to 2,500 Navy recruits during their first week of basic training in San Diego. Analysis showed a low positive correlation between the DBI items and basic graduation/attrition.

PERSON-JOB MATCHING

Kernodle, L. H. (Jun 1973) <u>Lateral entry recruitment at entry paygrades</u> (NPRDL Work, Tech. Rep. 73-29). (AD-760 672)

New methods and procedures for the lateral entry recruitment, or direct procurement, of perty officer personnel were developed. Comparisons for civilian occupations and training are comparable to that for several Navy Career Reenlistment Objective ratings.

Gilbert, A., & Yellen, T. (Sep 1973). Evaluation of occupational choices in the Marine Corps (NPRDC Tech. Rep. 74-7). (AD-773 349)

This study investigated the occupational preferences of Marine recruits with regard to occupational fields other than those in aviation. The Marine Assignment Preference Schedule (MAPS), was administered to 850 Marine recruits. Analysis showed that the five most preferred military occupational fields as indicated by the recruits first choice were: Motor Transport; Military Police; Construction; Equipment and Shore Party; Utilities; and Infantry.

Swanson, L. (Aug 1975). <u>Evaluation of revised Navy occupational information</u> (NPRDC Tech. Rep. 76-8). (AD-A142 158)

This study developed improved occupational information about Navy ratings and evaluated the revised materials. The Navy occupational handbook "Careers" was replaced by the new version called "Navy Ratings Review."

Yellen, T. M., & Foley, P. P. (Jun 1978). <u>Navy vocational information system</u> (NPRDC Tech. Rep. 78-22). (AD-A055 805)

As a part of a program to develop computerized Navy techniques for recruit assignment, counseling, and testing, a computer-based occupational counseling system was developed, based on useful features of existing information retrieval systems. The system acquainted individuals with various civilian careers that they might want to explore, and also provided occupational information concerning various Navy ratings that are related to those civilian careers.

Baker, H. G. (May 1983). <u>Person-job matching system for Navy recruiting: Background and needs assessment</u> (NPRDC Tech. Note 83-7). (AD-B073 932L)

Navy recruiting needs in the areas of 1) screening, 2) vocational guidance, 3) assignment, and 4) a systems approach to personnel accessioning were assessed through interview, questionnaire, and literature search. Recommendations were made for the enhancement of the person-job matching functions at recruiting stations.

Hamovitch, M. A., & Baker, M. S. (Sep 1983). <u>Strategy for enlisting lateral entrants via computer technology (SELECT)</u>: An automated system for determining rating pay grade qualification for potential Navy lateral entry accessions (NPRDC Tech. Rep. 83-33). (AD-A133 277)

This report describes SELECT, a system designed to streamline the process of determining proper ratings and assigning pay grades to potential Navy lateral entry accessions.

Kroeker, L. P., & Rafacz, B. A. (Nov 1983). <u>Classification and assignment within pride (CLASP)</u>: A recruit assignment model (NPRDC Tech. Rep. 84-9). (AD-A13 907)

The purpose of this research was to design, construct, and test a mathematical model for optimal assignment of Navy recruit applicants. Results showed that the CLASP personnel allocation system provides decision-makers with an improved tool for personnel classification and placement.

Kroeker, L. P., & Fol. hi, J. (May 1984) <u>Classification and assignment within pride</u> (CLASP) system: <u>Development and evaluation of an attrition component</u> (NPRDC Tech. Rep. 84-40). (AD-A141 833)

This research: 1) developed an attrition component for use in the CLASP model, and 2) evaluated its performance characteristics.

Kroeker, L. P., & Folchi, J. (Jul 1984). <u>Minority fill-rate component for Marine Corps recruit classification:</u> <u>Development and test</u> (NPRDC Tech. Rep. 84-46). (AD-A143 893)

A minority fill-rate component for the Marine Corps program management module, which governs the allocation of recruits to enlisted programs guaranteed within the Automated Recruit Management System (ARMS) was developed and tested.

Kroeker, L. P., & Folchi, J. (Jan 1985). <u>Marine Corps recruit classification: The program fill-rate component</u> (NPRDC Tech. Rep. 85-18). (AD-A150 041)

A fill-rate component was developed and tested for the Marine Corps program management module, which governs the allocation of recruit applicants to enlisted program guarantees within the Automated Recruit Management System (ARMS).

Diamond, E. E. (Jul 1985). <u>Development of the career maturity assessment</u> (MPL Tech. Note 85-7).

A Career Maturity Assessment (CMA) instrument to assist recruits in making career choices was developed. Following a review of the career maturity and vocational decision-making literated pilot version of the CMA was designed and constructed for eventual integration into a computerized vocational guidance system.

Buclatin, B. (Oct 198.). <u>Decision model to improve the assignment of enlisted program guarantees in the Marine Ccrps</u> (NPRDC Tech. Rep. 87-6). (AD-A173 871)

The report discusses the overall approach and design of a method for improving the assignment of Marine Corps enlistment program guarantees to recruit applicants.

Holland, J. L., & Baker, H. G. (Feb 1987). <u>Using expressions of vocational aspirations in military vocational guidance</u> (NPRDC Tech. Note 87-14). (AD-A177 779)

This report details the preliminary investigation into the feasibility of using vocational aspirations in a vocational guidance system designed for military recruiting. The literature indicates that the predictive validity of vocational aspirations usually equals or exceeds the validity of an interest inventory.

Holland, J. L., & Baker, H. G. (Dec 1987). <u>Preliminary classification of Army and Navy entry-level occupations by the Holland coding system</u> (NPRDC Tech. Note 87-5). (AD-A175 900)

This effort classified entry-level Navy ratings and Army military occupational specialties by the system most widely used for vocational counseling, the Holland coding system.

Gottfredson, G. D. (Feb 1988). <u>Development of the civilian-military interest survey (C-MIS)</u> (NPRDC Tech. Note 88-20).

Research to develop an inventory of vocational interests according to Holland's theory of vocational personalities and work environments is reported with emphasis placed on the potential applications of such an inventory in a recruiting environment. This report describes the development of a 90-item vocational interest inventory that is suitable for use in military recruiting, the results of its cross-validation, and possible future research.

RECRUITING MANAGEMENT AND SUPPLY

Borman, W., Hough, L., & Dunnette, M. (Feb 1976). <u>Development of behaviorally-based ratings scales for evaluating the performance of U.S. Navy recruiters</u> (NPRDC Tech. Rep. 76-31). (AD-A022 371)

This report describes development and field testing of job performance rating scales for the job of Navy recruiter. Over 800 critical incidents describing different facets of effective and ineffective recruiting performance were obtained from field recruiters and recruiter supervisors representing all Navy Recruiting Areas.

Arima, J. K. (Apr 1976). <u>A systems analysis of Navy recruiting</u> (NPRDC Spec. Rep. 76-9).

This research was a systems analysis of Navy recruiting, which investigated and documented Navy recruiting as a process that interacts with the larger military community of which it is a part and the civilian community which provides the raw materials it processes into accessions for the Navy.

Arima, J. K. (Jun 1978). <u>Determinants and a measure of Navy recruiter effectiveness</u> (NPRDC Tech. Rep. 78-21). (AD-A055 800)

This research developed a practical means of objectively measuring recruiter productivity. An equation was developed to predict productivity based on characteristics of the recruiter's geographic location and management policy. Using such an equation, production not under control of a recruiter could be isolated.

Borman, W., Toquam, J., & Rosse, R. L. (May 1979). <u>An inventory to predict Navy and Marine Corps recruiter performance: Development and validation</u> (NPRDC Tech. Rep. 79-17). (AD-A069 371)

This study developed paper-and-pencil predictors of Navy and Marine Corps recruiter performance and evaluated their validity. Several measures of personality, vocational interests, and background were developed or selected and administered to a geographically representative sample totaling 329 Navy and 118 Marine Corps recruiters.

Borman, W. C., Rosse, R. L., Toquam, J., and Abrahams, N. (Sep 1981). <u>Development and validation of a recruiter selection battery</u> (NPRDC Tech. Rep. 81-20). (AD-A104 681)

This report describes the development and validation of a battery of primarily paper-and-pencil instruments to identify those individuals most likely to become successful recruiters.

Borman, W. C., Toquam, J., Rose, S., & Abrahams, N. (Jan 1984). <u>Evaluation of three programs to assist Navy recruiters</u> (NPRDC Tech. Rep. 84-13). (AD-A137 566)

The Navy Recruiting Command (NRC) has developed and implemented three programs that use temporary recruiter assistants to aid recruiters in generating contracts and enlisting young persons in the Navy. Recruiting assistants were generally effective in generating recruiting contacts: participants have significant residual effectiveness in developing working relationships between recruiters and high school students and staff.

Borman, W. C., Rosse, R. L., & Rose, S. R. (Dec 1984). <u>Inventory battery to predict performance in Navy officer recruiting: Development and validation</u> (NPRDC Tech. Rep. 85-13). (AD-A149 243)

This research developed and evaluated a paper-and-pencil inventory battery to help identify officers with the personal characteristics necessary for successful recruiting duty.

Baker, H. G. (Jun 1985). <u>Designing a vocational guidance system for military recruiting:</u> <u>Problems and prospects. I. Organizational and operational considerations</u> (MPL Tech. Note 85-5).

This effort 1) assessed the potential for trial and implementation of a VG system by dilineating the various restraining and driving forces, 2) highlight the general constraints under which a VG system will have to operate, 3) noted policy modifications that would be prerequisite to field testing or implementation, 4) made recommendations concerning future directions of research and development in the area of recruiting-oriented VG.

Atwater, D. C., Abrahams, N. M., & Trent, T. T. (May 1986). Validation of the Marine Corps special assignment battery (SAB) (NPRDC Tech. Rep. 86-18). (AD-A168 280)

Two studies involving the SAB recruiter selection composite, and one study concerning the drill instructor selection score were undertaken. The results of these studies provided strong confirmatory evidence for earlier development work. Based on these findings, NPRDC recommended implementing SAB as one of the selection factors for assigning Marines to recruiting or drill instructor duty.

Robertson, D. W. (Mar 1989). Navy recruiter survey: Interview phase (NPRDC Tech. Note 89-16).

In this first phase of the Recruiter Survey Project, recruiters were interviewed in the field (at their recruiting stations). The data from these interviews were used to:
1) identify problems and issues, 2) develop a survey instrument, 3) conceptualize a recruiter work stress model, and 4) suggest steps toward improving recruiter work life.

COMPUTERIZED RECRUITING FUNCTIONS

Baker, H. G. (May 1983). Navy personnel accessioning system (NPAS). I. Background and overview of the person-job matching (PJM) and recruiting management support (RMS) subsystems (NPRDC Spec. Rep. 83-34). (AD-A129 325)

This report provides an overview of the PJM and RMS subsystems. The applicant-oriented PJM functions would enhance the Navy's public image and increase the probability that applicants would enlist in the Navy and convince friends to visit the Navy recruiter. The RMS functions would save the recruiter time, reduce clerical error, and facilitate reporting.

Baker, H. G. (May 1983). Navy personnel accessioning system (NPAS). II. Summary of research and development efforts and products (NPRDC Spec. Rep. 83-35). (AD-A129 326)

The purpose of the NPAS project was to develop, test, and evaluate a distributed processing, Navy Personnel Accessioning Network. Computer-based personnel assessment and measurement techniques were to be integrated into system design to serve as a data base management and labor-saving device for the Navy Recruiting Command, assign recruits optimally to Navy ratings and reserve training school seats, provide individualized career information to applicants with fewer support personnel than at present, and improve job placement.

Baker, H. G., Rafacz, B. A., and Sands, W. A. (May 1983). <u>Navy personnel accessioning system (NPAS)</u>. <u>III. Development of a microcomputer demonstration system</u> (NPRDC Spec. Rep. 83-36). (AD-A129 319)

This research developed a demonstration version of the NPAS system, capable of running on a stand alone microcomputer, as a briefing model and a demonstration vehicle; and demonstrated the system to Navy Recruiting Command management to assist them in evaluation of its effectiveness in meeting the needs of Navy recruiting.

Baker, H. G., Rafacz, B. A., & Sands, W. A. (Jan 1984). <u>Computerized adaptive</u> screening test (CAST): Development for use in military recruiting (NPRDC Tech. Rep. 84-17). (AD-A138 554)

The CAST, which is capable of operating on a stand-alone microcomputer system in recruiting stations, was designed and developed to replace the Enlistment Screening Test (EST) currently in use. EST is used by all services; thus, as recruiting operations are automated, CAST has potential value to them all for reducing administrative and clerical burdens on the recruiter.

Baker, H. G. (Feb 1984). <u>Computerized vocational guidance (CVG) systems: Evaluation for use in military recruiting (NPRDC Tech. Rep. 84-21).</u> (AD-A139 527)

Five civilian and three military computerized vocational guidance (CVG) systems were considered and evaluated for their contributions to the design and development of a CVG system for use in military recruiting. It was recommended that a system specifically designed for the recruiting environment be developed.

Hardwick, S., Cooper, R., Eastman, L., & Vincino, F. L. (Mar 1984). Computerized adaptive screening testing: A user manual (NPRDC Tech. Rep. 84-32). (AD-A139 938)

To enable evaluation of CAST operations, psychometric characteristics, and predictive utility, a prototype system was developed for use in assessing the feasibility of using CAST with Army, Air Force, Marine Corps, Navy recruits. This report provides a user manual for administering personnel classification tests on the system.

Quan, B., Park, T. A., Sandhal, G., & Wolfe, J. H. (Mar 1984). Microcomputer network for computerized adaptive testing (CAT) (NPRDC Tech. Rep. 84-33). (AD-A140 256)

A hardware and software system was developed for experimental administration of computerized aptitude tests to military personnel. This report contains the system documentation, and user documentation.

Baker, H. G., Sands, W. A., & Rafacz, B. A. (May 1986). Research and development in support of the joint optical information network (JOIN) (NPRDC Tech. Rep. 86-19). (AD-A168 276)

This report summarizes the research and development accomplished by NPRDC in support of the first large scale application of computers to the recruiting and personnel testing process, the Army Joint Optical Information Network (JOIN) System.

Norris, L., & Baker, H. G. (Sep 1986). <u>Development of an automated instrument to assess enlistment motivation</u> (MPL Tech. Note 86-9).

This report details the development of an automated instrument to identify enlistment motives, for use on the Army's advanced computerized accessioning system, the Joint Optical Information Network (JOIN).

Baker, H. G., Berry, V. M., Kazan, J. B., & Diamond, E. E. (Jun 1987). <u>Development of an automated instrument to assess career maturity: The career plans checkup</u> (NPRDC Tech. Note 87-26). (AD-A181 949)

An existing pencil and paper measure, the Career Maturity Assessment (CMA) was validated on Navy recruits, using another existing measure, My Vocational Situation, as the criterion. A computerized version of the CMA, called Career Plans Checkup, was developed and validated on Navy recruits, with the CMA as the criterion. The measures were highly correlated. It was concluded that all three instruments measure the same construct, career maturity.

Baker, H. G., Berry, V. M., & McClintock, V. M. (Apr 1988). <u>Identifying enlistment motivators with an automated instrument</u> (NPRDC Tech. Note 88-31). (AD-A194 121)

This document describes the development of a fast, computerized test of enlistment motivation suitable for use on the Army's Joint Optical Information Network (JOIN) system during applicant interviews.

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